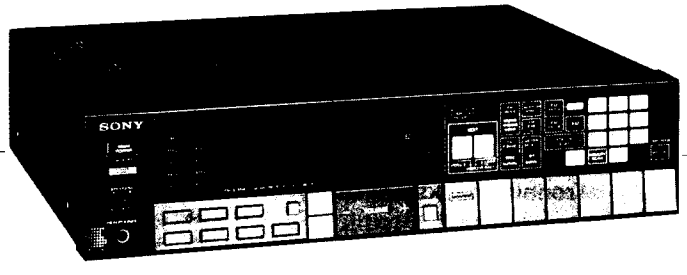
SONY®

FM STEREO/FM-AM RECEIVER

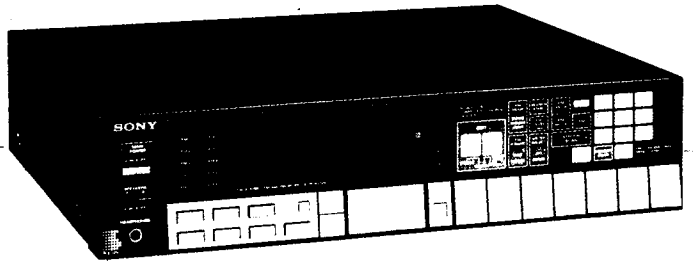
STR-AV560/AV760

OPERATING INSTRUCTIONS

Before operating the unit, please read this manual thoroughly.
This manual should be retained for future reference.



STR-AV760



STR-AV560

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This instruction manual covers the STR-AV560 and the STR-AV760. Where differences occur, they are clearly described in the appropriate sections.
The photos and illustrations used in the manual are of the STR-AV760.

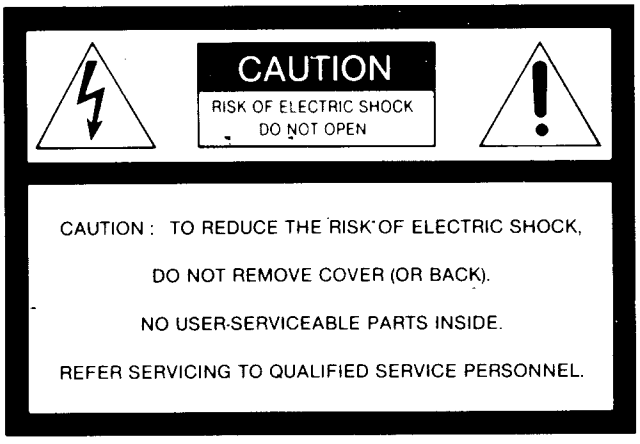
OWNER'S RECORD

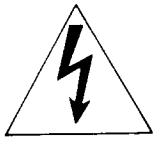
The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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FOUR TUNING METHODS

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FEATURES

The STR-AV560/AV760 is a combined receiver and audio/video control center, which makes it possible to connect to your audio system one hi-fi video cassette recorder for both playback and recording and another for playback.

- The ASP (Audio Signal Processor) IC developed by Sony can digitally control the tone and volume settings, and permits electronic program source selection with a single touch of a key. The ASP IC also offers great flexibility — an acoustic memory function, an ability to store and recall three sets of tonal adjustments and a volume fade-in function, an ability to set the volume to the minimum level when the power is turned on and automatically increase it to a previously set level.
- A quartz-locked digital synthesizer system with a sophisticated Phase-Locked Loop (PLL) circuit allows extremely precise tuning of FM and AM stations with an electronic digital readout on the frequency display. A total of 10 stations can be preset; all receivable stations can be located and scanned.
- Video tapes can be edited from the hi-fi video cassette recorder connected to the VIDEO 2 jacks to the hi-fi video cassette recorder connected to the VIDEO 1 jacks. While video tapes are being edited, other program sources can be enjoyed. Audio dubbing is also possible.
- The computerized logic tuning system automatically selects the appropriate FM mode and FM IF band according to the signal strength of the station received.
- The station spectrum display allows you to identify at a glance the frequencies of all preset stations or stations which are receivable with station scan tuning.
- A CATV cable can be connected directly to the receiver, facilitating FM simulcast program reception.
- The optional RM-S760 remote commander allows you to control from a distance all components connected to the receiver.

PRECAUTIONS

On safety

- Operate the unit only on 120 V ac, 60 Hz.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.

On installation

- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circulation is essential to prevent internal heat build-up in the unit. Place the unit in a location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.

On operation

- Before making program source connections, be sure to turn the power switch off and unplug the unit.
- When the unit is not used, turn the power off, to conserve energy and to extend the useful life of your unit.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in. When shipping the unit for repair work or to another location, repack it as illustrated on the carton box.

To change the AM tuning interval

The AM tuning interval is preset at the factory to 10 kHz to match the frequency allocation system of your country.

If you use the receiver where the frequency allocation system is based on a 9 kHz interval, change the interval as follows.

1 Press the MAIN POWER and SYSTEM POWER switches to turn on the unit.
2 Tune in any AM station.
3 Press the MAIN POWER switch to turn it off.
4 While pressing the STATION SCAN + key, press the MAIN POWER switch to turn it on.

The AM tuning interval has been set to 9 kHz. To reset the interval to 10 kHz, follow the same procedure.

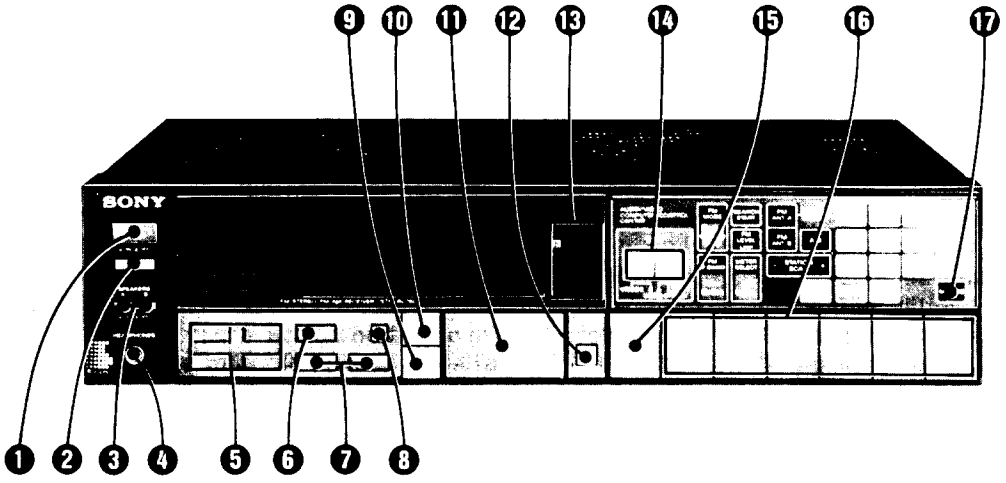
Note

When the interval is changed, all preset stations which you have memorized to the number keys and all located stations will be erased in addition to the acoustic memory previously set. After changing the interval, be sure to preset or search the stations and set the acoustic memory again.

For detailed safety precautions, see the "IMPORTANT SAFEGUARDS" leaflet.

LOCATION AND FUNCTION OF CONTROLS

Amplifier section



❶ MAIN POWER switch
Depress this switch (⏍ON) to turn on the mains power. The STANDBY indicator will light up. Press it again (⏍OFF) to turn it off.
If the MAIN POWER switch has not been turned on, you cannot turn on the receiver and connected components by pressing the SYSTEM POWER switch, or operate them with the optional remote commander.

❷ SYSTEM POWER switch
Press this switch to turn the receiver and connected components on and off.
When this switch is pressed, the function selected last or the last station to be received will be displayed.
You can operate the switch from a distance with the remote commander.

❸ SPEAKERS selector
Select speaker system A or B, or both.

❹ HEADPHONES jack
Accepts any low or high impedance stereo headphones. For headphone monitoring only, keep both SPEAKERS switches OFF.

❺ BASS and TREBLE TONE control keys
Control the prominence of bass and treble response.

❻ SUBSONIC FILTER key
Press this key to reduce unwanted subsonic noise component created by warped records, etc. The SUBSONIC indicator will appear in the display window and the filter will cut off any input signals below 15 Hz at a 6 dB-per-octave rate. Press the key again to disengage it.

❼ BALANCE control keys
Governs the amount of sound coming from each paired speaker to get optimum stereo effect.
Pressing the R key will decrease the left channel volume, and pressing the L key will decrease the right channel volume.

❽ MEMORY key
When this key is pressed, the number of the acoustic memory key will flash and the three acoustic settings can be stored.

❾ FLAT key
Press this key to disengage the acoustic setting for a flat frequency response.

❿ ACOUSTIC key
After pressing the MEMORY key, press this key to store the tone settings. Once they have been set, you can recall these acoustic settings instantly.

⓫ VOLUME control key
Regulates the overall sound level. Pressing its right-side (+) will increase the sound level, and pressing its left-side (–) will decrease it.

⓬ MUTING key
Press this key to attenuate the sound level by ∞. The MUTING indicator will appear in the display window. Press again to disengage the key and you can restore the same listening level as before. You will find this function useful when lowering the tonearm onto a record or when you answer the telephone.

⓭ Indicators for remote control
REMOTE SENSOR: Receives the infrared ray command of the remote commander.
STANDBY indicator: Lights when the mains power is turned on. The receiver is in the standby mode for remote control operation.
RECEIVED indicator: Blinks when a key on the remote commander is pressed.

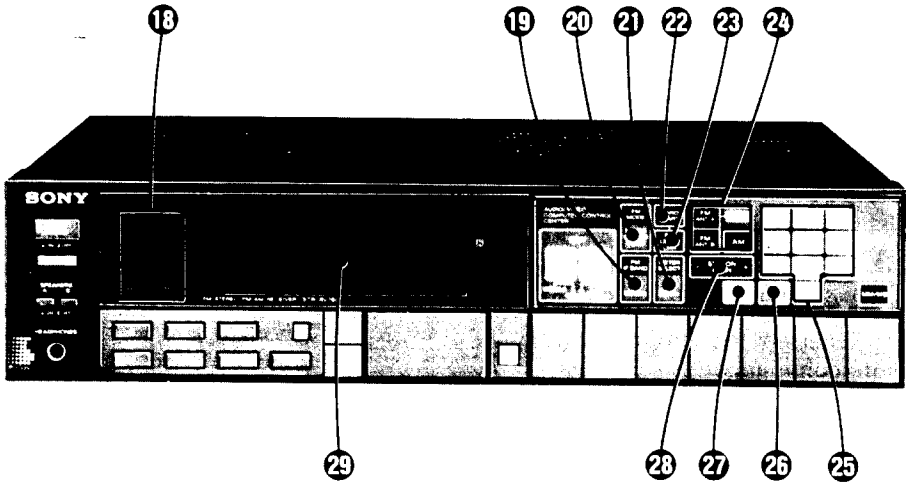
⓮ EDIT keys
AUDIO: For recording an audio program source selected by the function select key on a video tape or adding that source to a video tape while editing from VCR 2 to VCR 1. The indicator will light up.
VIDEO: For editing a video tape from VCR 2 to VCR 1. The indicator will light up.

⓯ TAPE 2 (MONITOR) key
Press this key to listen to a tape deck connected to the TAPE 2 inputs on the rear panel. The MONITOR indicator will light up. When listening to program sources other than a taped program of a tape deck connected to the TAPE 2 inputs, press this key again to disengage it. The indicator goes out.

⓰ Function select keys
Press one of these keys to select a desired program source other than a taped program of a tape deck connected to TAPE 2 inputs.
The associated indication of the pressed key will appear in the display window.
PHONO: For record programs (connected to PHONO inputs).
TUNER: For broadcasting programs.
When pressing this key, the frequency of the last station received will appear.
CD/AUX: For compact disc or auxiliary programs (connected to CD/AUX inputs).
VIDEO 1: For video programs of VCR 1 (connected to VIDEO 1 inputs).
VIDEO 2: For video program of VCR 2 (connected to VIDEO 2 inputs).
TAPE 1 (TAPE 1→2): For taped programs of tape deck 1 (connected to TAPE 1 inputs).

⓱ CARTRIDGE select key (STR-AV760 only)
For moving-coil type cartridges, press this key so that the MC indicator is displayed. For moving-magnet type cartridges, press this key again so that the MM indicator is displayed.

Tuner section



⑱ STATION INDEX (station identification) windows
Station labels (supplied) identifying stations to the number keys memorized can be placed in these windows.

⑲ FM IF BAND key
When an FM station is first tuned in (except by preset tuning), the receiver determines if there is likely to be interference from an adjacent station. If there is not, the IF band is automatically changed from normal (⎍) to wide (⎍).
Press this key to change the band manually. The IF band selected will be indicated in the display window.

⑳ FM MODE key
When an FM station is tuned in, the receiver determines the signal strength of the station and is automatically set to the appropriate FM mode : STEREO for a strong station, HI-BLEND for a slightly weak station.
Press this key when you wanto to change the FM mode manually so that the desired mode indicator is displayed.
HIGH-BLEND : When receiving a slightly weak station. Stereo effects at higher frequencies will be slightly reduced but noise will be reduced.
MONO : When receiving very weak FM station. There is no stereo effect but the reception will be more stable and noise will be reduced.

㉑ METER SELECT key
Press this key to change the ATT (volume attenuation) indicator to the SIGNAL (signal strength) indicator, or vice versa.

㉒ SEARCH START key
Press this key to start searching receivable stations.

㉓ FM LEVEL select key
Press this key to select the level of FM stations to be searched. For searching both strong and weak stations, press this key so that the LOW indicator is displayed. For searching strong and mid-level stations, press it so the MID indicator is displayed. For strong stations only, press it so the HIGH indicator is displayed.

㉔ Band/antenna select keys
Press the AM key to receive AM broadcasting.
Press the FM ANT-A key to receive FM broadcasting using the FM antenna connected to the CATV ANT-A connector or to receive cable TV programs when the CATV cable is connected.
Press the FM ANT-B key to receive FM broadcasting, using the FM antenna connected to the FM ANT-B connector.

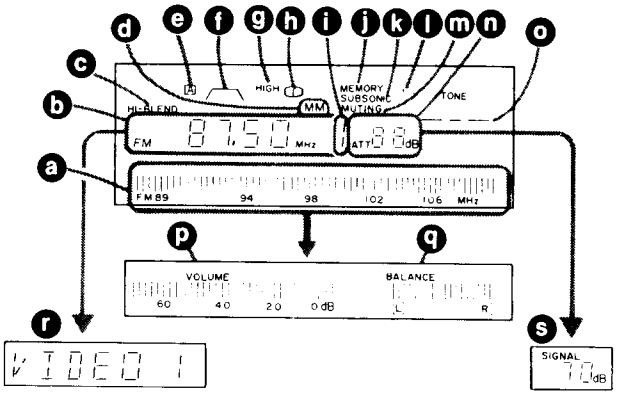
㉕ DIRECT ACCESS TUNING/PRESET TUNING keys (number keys)
For direct access tuning (the number keys serve as DIRECT ACCESS TUNING keys) : After pressing the FM ANT-A, FM ANT-B or AM key, input the frequency of the desired station by pressing these keys.
For preset tuning (the number keys serve as PRESET TUNING keys) : After pressing the MEMORY PRESET key, press to preset the station being received. Also press to call up a station which has been memorized in this way.

㉖ MEMORY SCAN key
Press to scan automatically the stations memorized on the number keys.

㉗ MEMORY PRESET key
To memorize the frequency of a station, when the station is received, press this key, then press the number key.

㉘ STATION SCAN key
Press to scan the receivable stations located.

㉙ Display window



ⓐ **Station spectrum display**
In TUNER mode, this display will appear instead of the VOLUME and BALANCE indicators. The frequencies of the receivable stations located or the stations memorized to the number keys are shown by the vertical bars. When a station is tuned in, the corresponding bar flashes.

ⓑ **Band/frequency display**
The band and frequency being received are displayed here.

ⓒ **FM MODE indicator**
The indicaton of the selected FM mode, HIGH-BLEND or MONO, will appear. STEREO indication will appear when a stereo program is tuned in.

ⓓ **Cartridge type indicator**
The type of cartridge selected by the CARTRIDGE select key is displayed.

ⓔ **FM ANTENNA indicator**
When you press the FM ANT-A key, [A] indication will appear. When you press the FM ANT-B key, [B] indication will appear.

ⓕ **FM IF BAND indicator**
The selected FM IF band is graphically indicated. ⎍ indication shows the IF band is wide or ⎍ indication shows the IF band is normal.

ⓖ **FM LEVEL indicator**
The FM station level selected by the FM LEVEL select key is displayed here.

ⓗ **VIDEO MONITOR indicator**
The indication of a selected video function key [1] or [2] appears.

ⓘ **Preset number key indicator**
When a number key is pressed, its number appears here. When the MEMORY SCAN key is pressed, the numbers of the number key change in sequence and the corresponding bar flashes.

ⓙ **MEMORY indicator**
Appears when you press the MEMORY PRESET key.

ⓚ **SUBSONIC indicator**
Appears when you press the SUBSONIC FILTER key.

ⓛ **ACOUSTIC indicator**
With each press of the ACOUSTIC key to call up the acoustic setting memory, the number of the memorized key appears.

ⓜ **MUTING indicator**
Appears when you press the MUTING key.

ⓝ **Volume attenuation level indicator**
The volume is indicated by the attenuated level. 0 dB is the maximum volume and -∞ dB is the minimum volume.

ⓞ **TONE indicator**
The bars move up and down, depending on the tone control settings, graphically showing the tone control characteristics.
A straight bar graph indicates a flat frequency response.

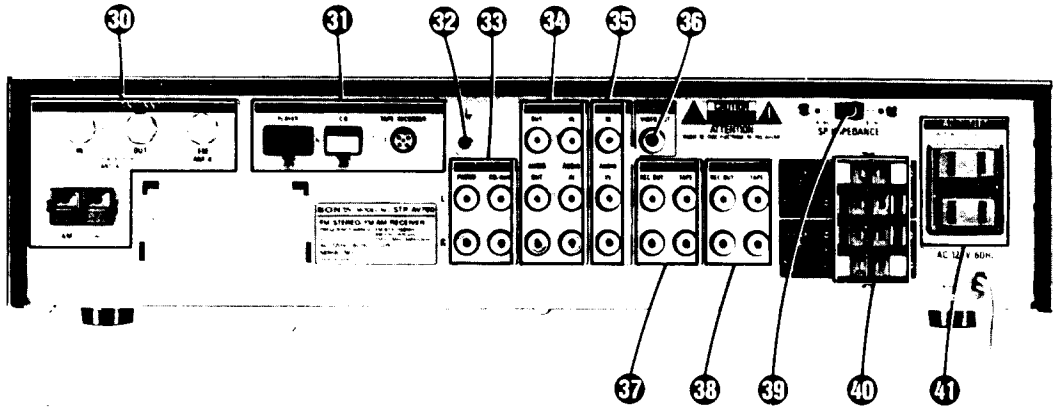
ⓟ **VOLUME indicator**
The volume level is indicated by the number of vertical bars. In TUNER mode, when you press the VOLUME control key, the station spectrum display disappears and the VOLUME indicator appears. A few seconds later, the display automatically changes back to the station spectrum display.

ⓠ **BALANCE indicator**
The bar move between L and R on the indicator to indicate the relative strength of the volume at the left and right channels. In TUNER mode, when you press the L or R BALANCE control key, the station spectrum display disappears and the BALANCE indicator appears. A few seconds later, the display automatically changes back to the station spectrum display.

ⓡ **Function indicator**
When any of the function select keys other than TUNER and TAPE 2 (MONITOR) is pressed, the corresponding indication appears instead of the band/frequency display.

ⓢ **SIGNAL indicator**
When you press the METER SELECT key, the volume attenuation level indicator disappears and the SIGNAL indicator appears. The received signal strength is indicated in decibels (dB).

Rear panel



30 ANTENNA terminals

AM and ⏚ (antenna ground) terminals : Connect the supplied layout-free AM external ferrite bar antenna.

CATV ANT-A IN connector (F type) : Connect an FM external antenna or a CATV cable.

CATV ANT-A OUT connector (F type) : When a CATV cable is connected to the IN connector, connect to the VHF IN of the VCR or of the TV tuner. When an FM external antenna is connected to the IN connector, this connector can feed signals to another FM tuner.

FM ANT-B connector (F type) : For FM reception connect an FM external antenna here.

31 REMOTE CONTROL connectors

By connecting the remote control cords supplied with the optional RM-S760 remote commander, you can remotely control some functions of the receiver and the connected equipment.

PLAYER connector (6 pin) : Connect to the remote control jack of a turntable system.

Control S connector (4 pin) : Connect to the remote control connector of a CD player or other audio component equipped with 4-pin control S connector.

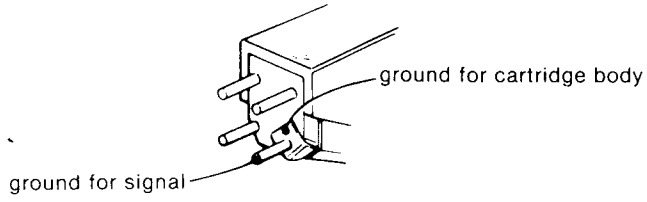
TAPE RECORDER (5 pin) : Connect to the remote control connector of a tape deck.

32 ⏚ (phono ground) connector

Connect the ground wire of a turntable system.

Note

In some particular MM cartridges, the ground for signal is connected to the ground for cartridge body. If this type of cartridge should be installed to a metal cartridge shell, current will flow through the tonearm ground in a loop and will cause hum noise. In this case, disconnect the turntable ground wire from the ⏚ terminal, or disconnect the ground for cartridge body from the ground for signal.



33 INPUT jacks (phono jack)

PHONO inputs : Accept the outputs of a turntable system.

CD/AUX (compact disc/auxiliary) inputs : Accept the outputs of a compact disc player or input sources such as a tape deck for playback only.

34 VIDEO 1 jacks (phono jack)

OUT jack : Accepts the video input of a VCR.

IN jack : Accepts the video output of a VCR.

AUDIO OUT jacks : Accept the audio inputs of a VCR for recording the audio program source onto the video tape.

AUDIO IN jacks : Accept the audio outputs of a VCR for listening to the recorded video tape.

35 VIDEO 2 jacks (phono jack)

IN jack : Accepts the video output of a TV tuner or a playback VCR.

AUDIO IN jacks : Accept the audio outputs of a TV tuner or a playback VCR.

36 MONITOR output (phono jack)

Accepts the video input of a component TV.

37 TAPE 1 jacks (phono jack)

REC OUT jacks : Accept the line inputs of tape deck 1 for tape recording.

TAPE inputs : Accept the line outputs of tape deck 1 for playing back a tape.

38 TAPE 2 jacks (phono jacks)

REC OUT jacks : Accept the line inputs of tape deck 2 for tape recording.

TAPE inputs : Accept the line outputs of tape deck 2 for playing back a tape.

39 SP IMPEDANCE (speaker impedance) selector

When connecting one pair of speaker systems with an impedance of 4 - 6 ohms, set to 4 - 6 ohm position or with an impedance of 8 - 16 ohms, set to 8 - 16 ohm position. When connecting two pairs of speaker systems, set to the lower impedance position.

40 SPEAKER A, B connectors

For connecting a speaker system or two pairs of speaker systems. System A and system B can be selected by means of the front panel SPEAKERS selectors.

41 AC OUTLETs (SWITCHED TOTAL 100W)

These are used to power other audio components whose total power consumption is less than 100W .

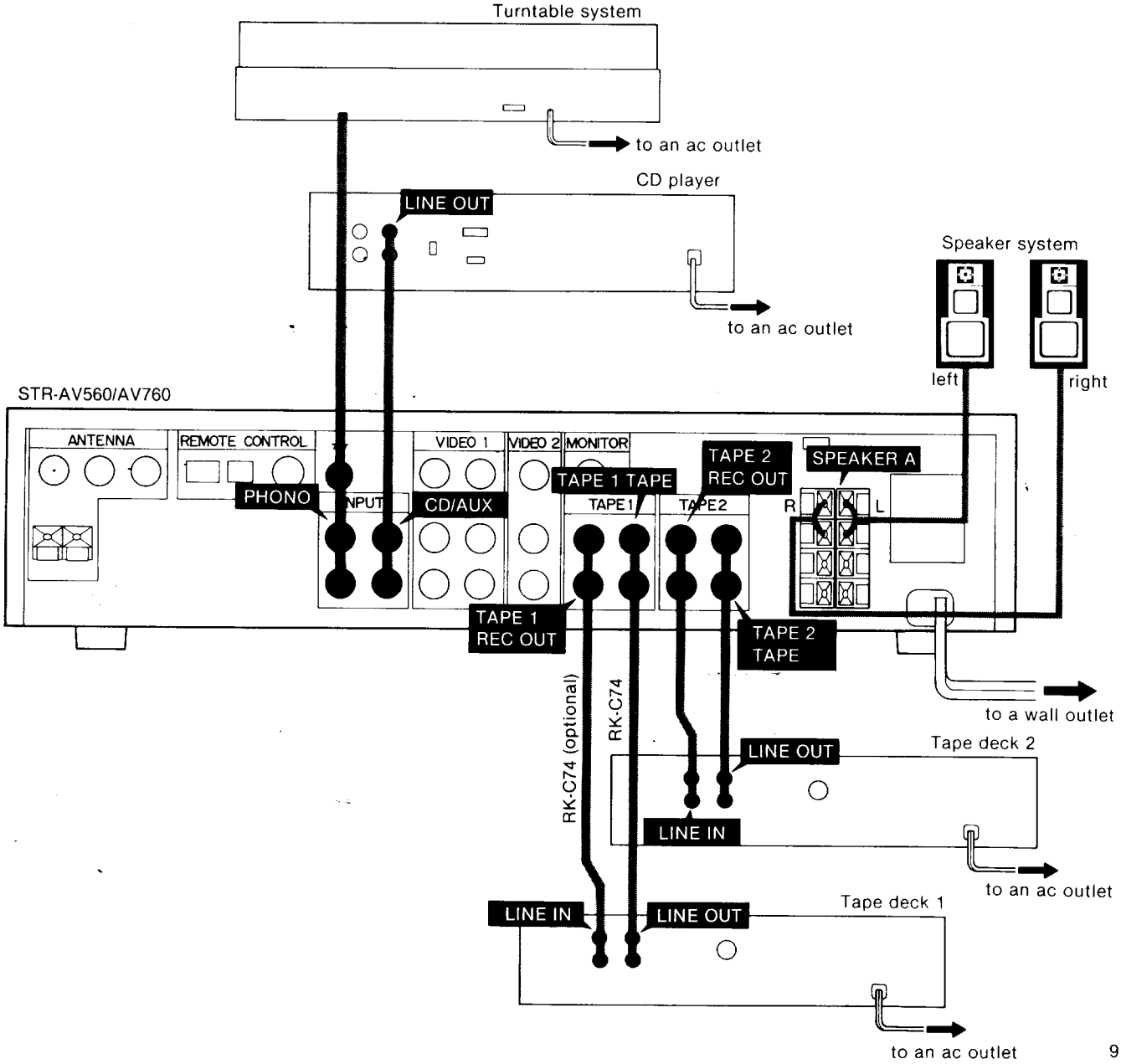
Connection notes

- The power cord should be connected last of all, first making sure that the MAIN POWER switch is turned off.
- When connecting audio and video equipment, note that the red jacks of the receiver are for right-channel audio connections and the white jacks for left-channel audio connections and the yellow jacks for video connections.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.

CONNECTION DIAGRAM

Before connection, be sure to set the MAIN POWER switch to OFF (⏻).

AUDIO SYSTEM CONNECTION

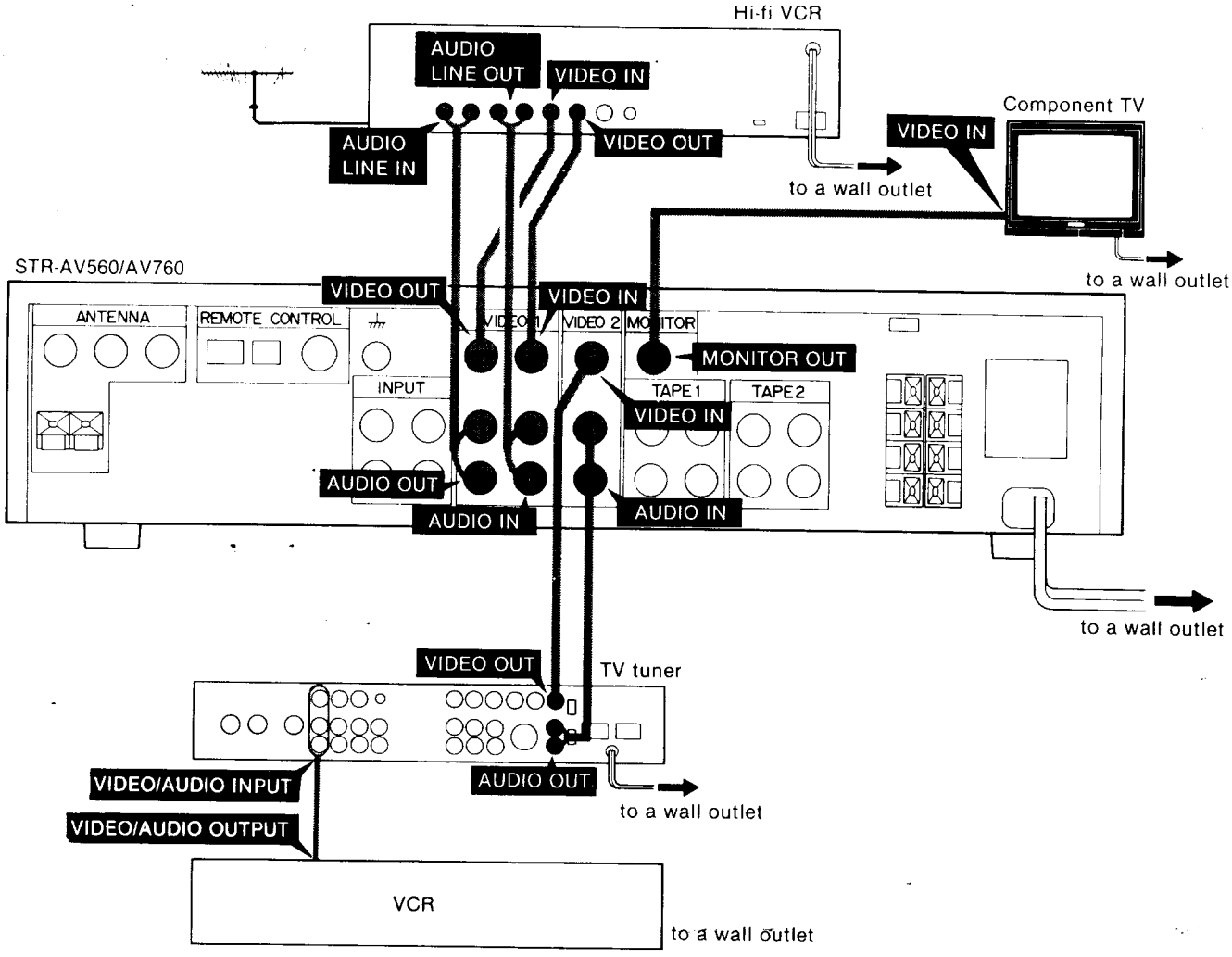


VIDEO SYSTEM CONNECTION

Before making connections, refer to the instruction manual of the VCR.

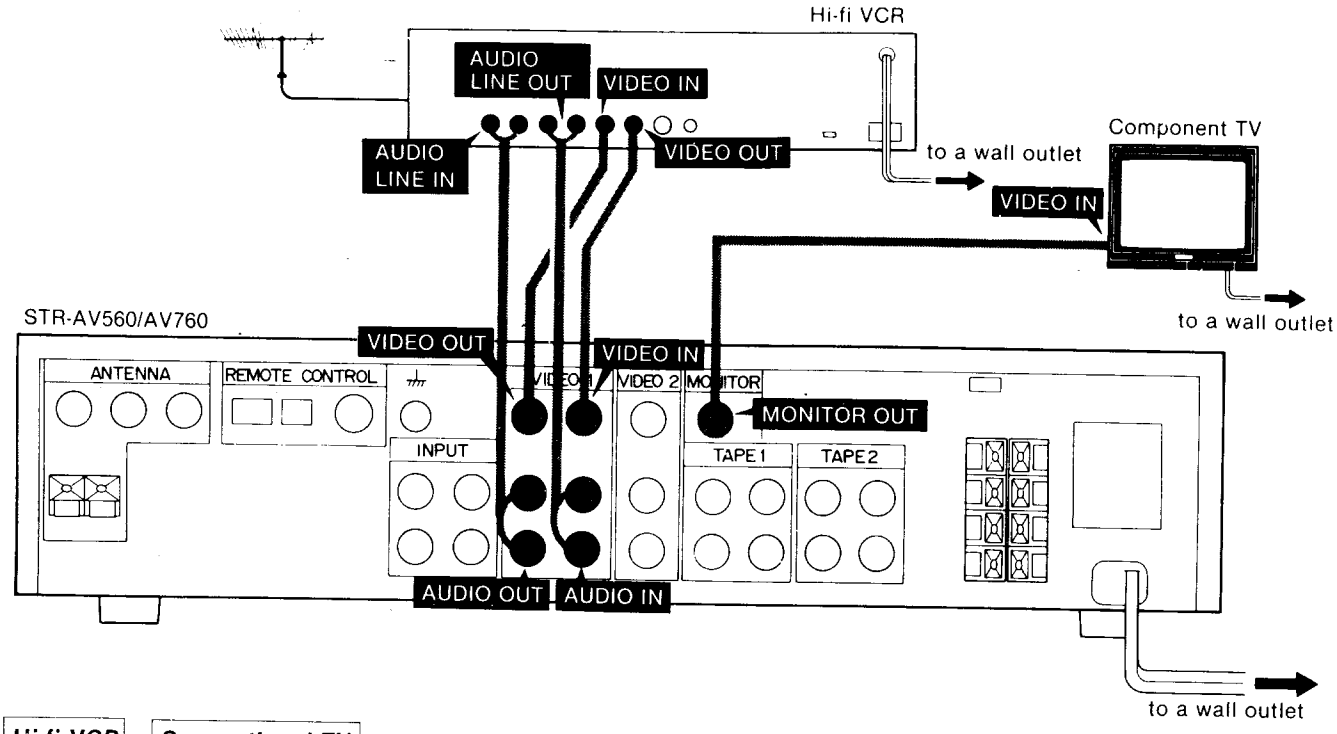
Hi-fi VCR + **Component TV** + **TV tuner**

Connect a hi-fi VCR to VIDEO 1 outputs/inputs for recording and playback.
A TV tuner has plural video inputs and outputs used for enhanced system connection of video equipment so that you can enjoy various video programs.

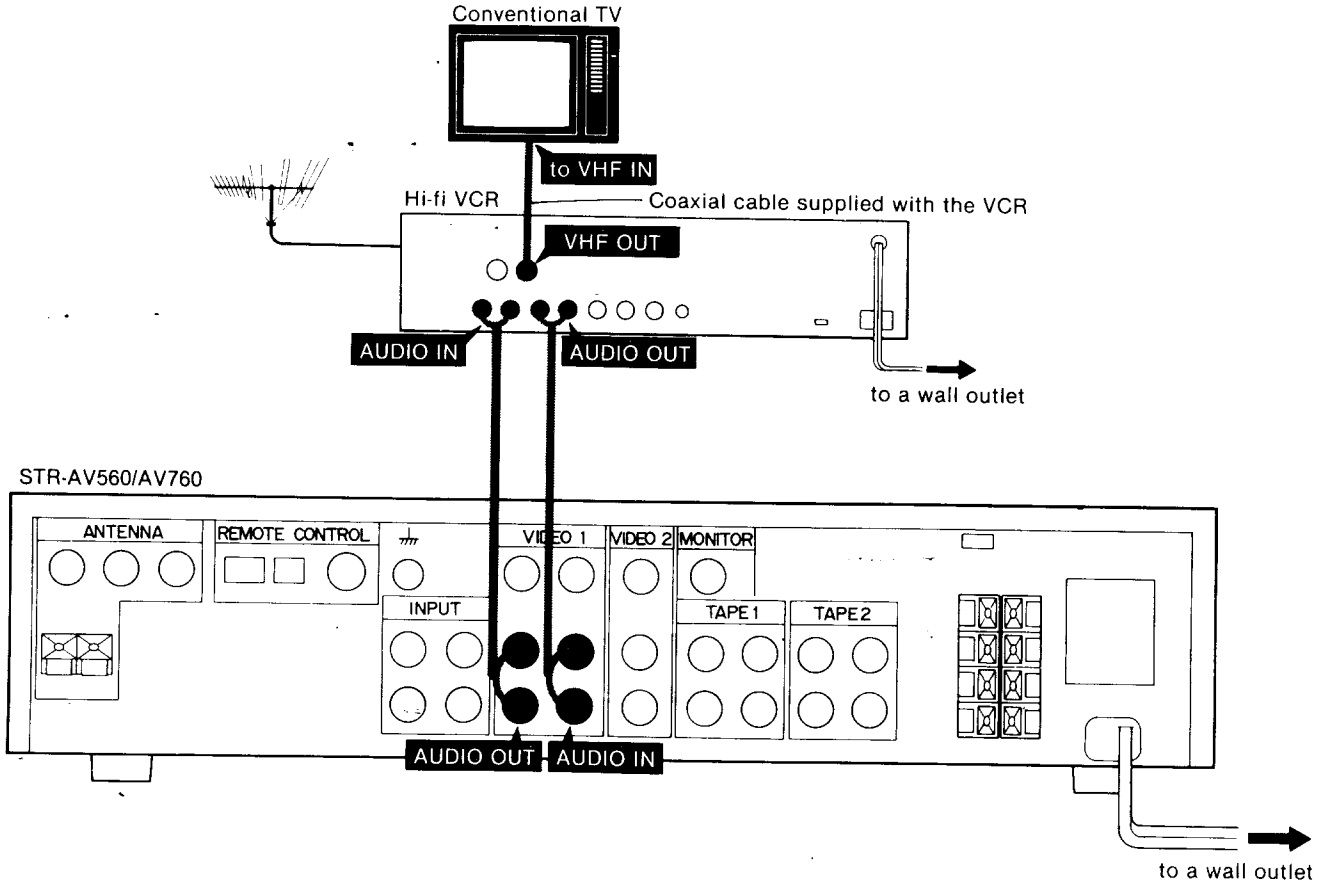


Note
When connecting a second VCR without a TV tuner, connect it to the VIDEO 2 jacks.

Hi-fi VCR + Component TV

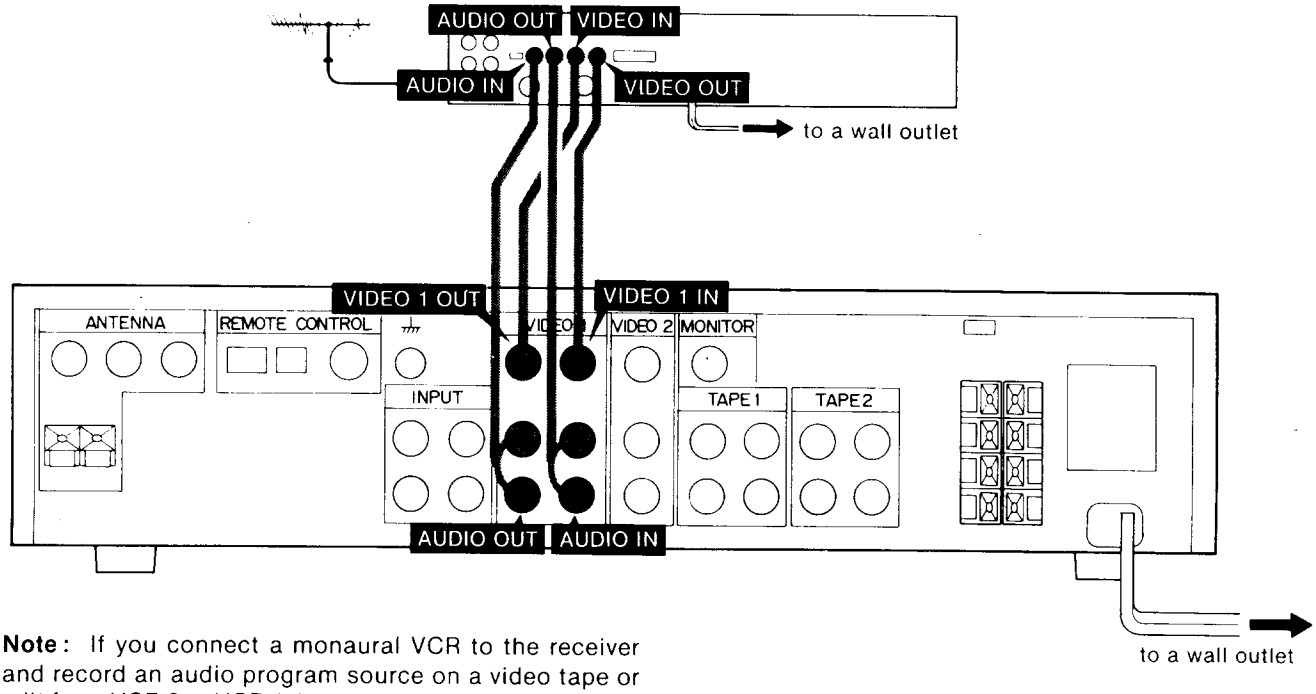


Hi-fi VCR + Conventional TV



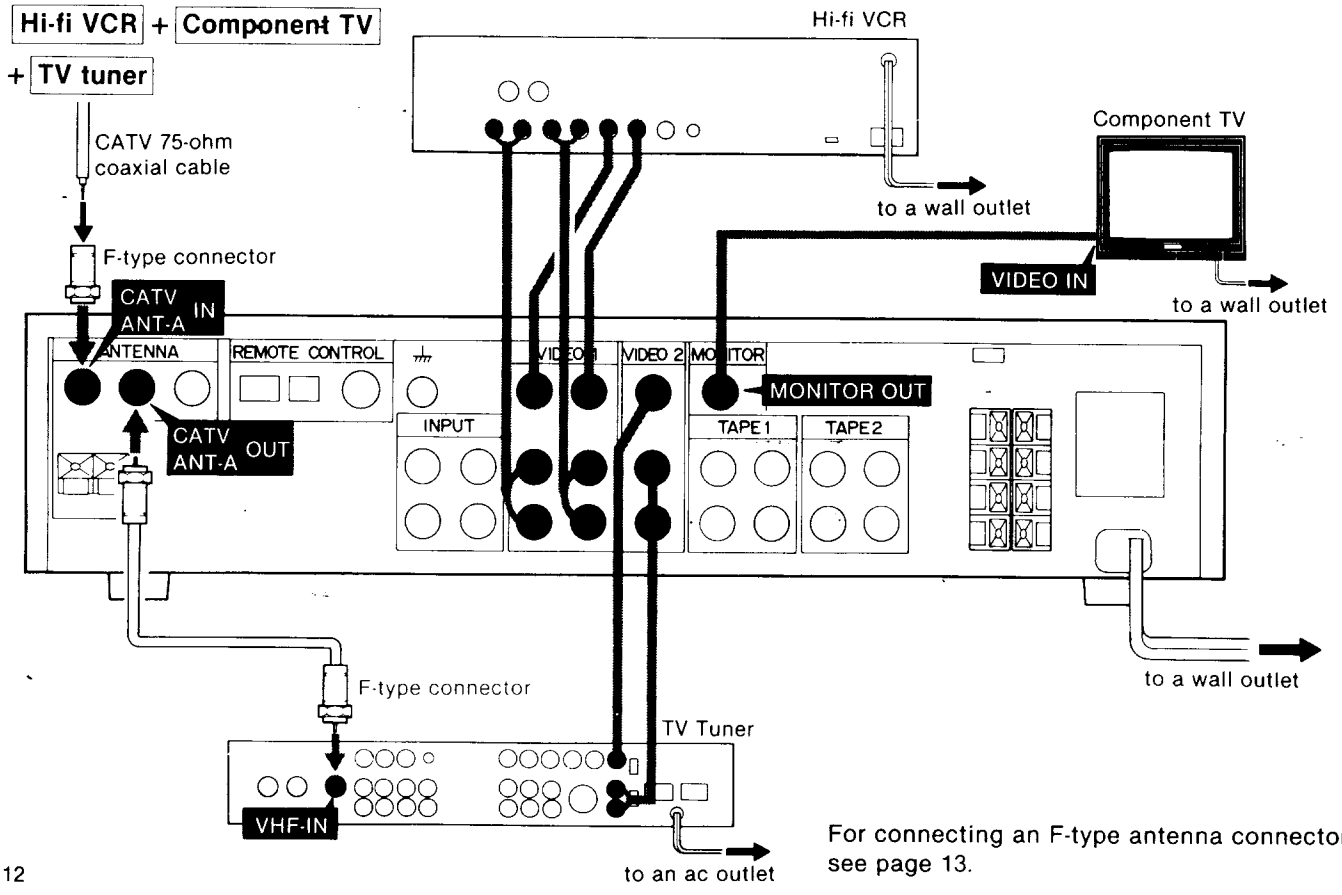
MONAURAL VCR CONNECTION

Connect it as follows, using the RK-G105 connecting cords for audio signal connection. Refer to the diagrams indicated before on the other connection.



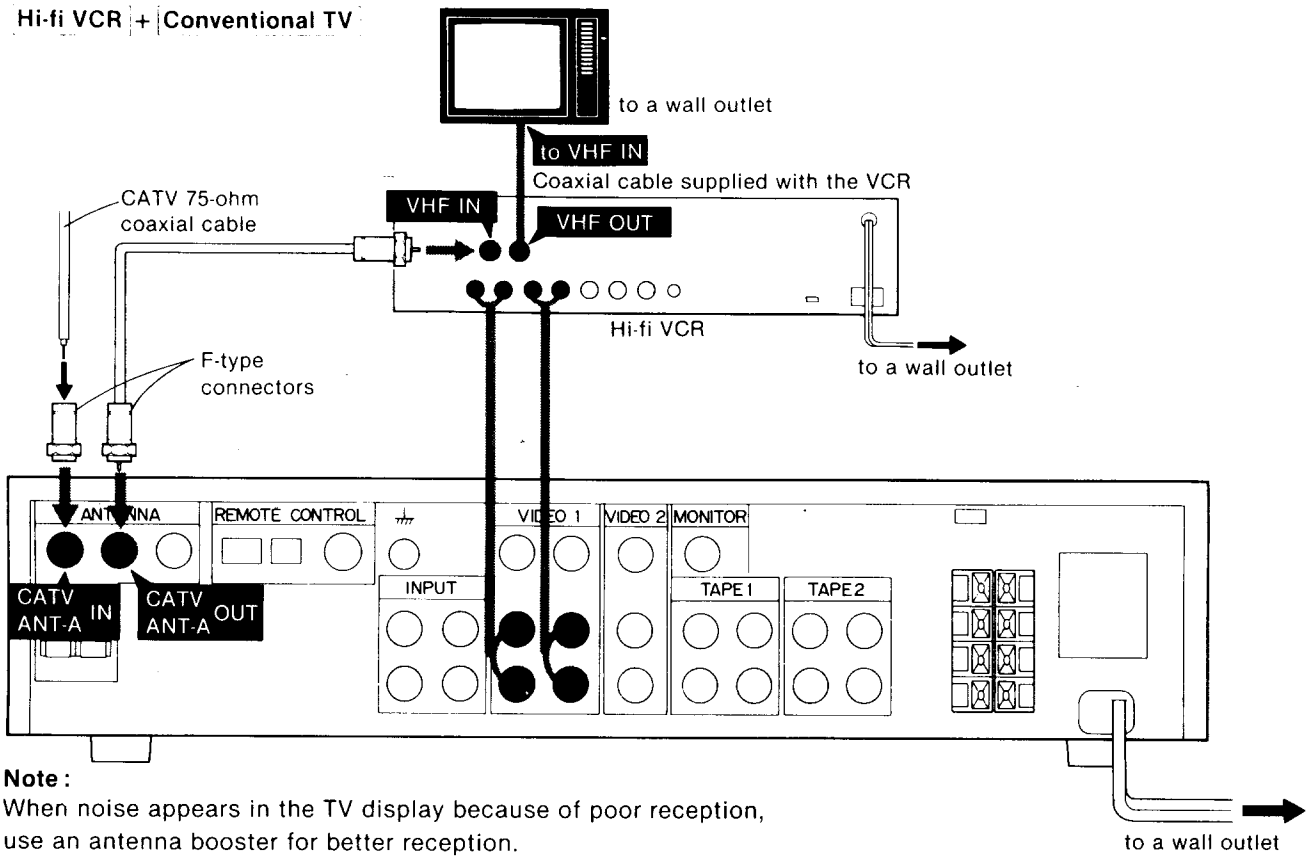
Note: If you connect a monaural VCR to the receiver and record an audio program source on a video tape or edit from VCR 2 to VCR 1, it may happen that stereo separation of the program source heard from the speakers will be worsened.

CATV SYSTEM CONNECTION



For connecting an F-type antenna connector, see page 13.

Hi-fi VCR + Conventional TV



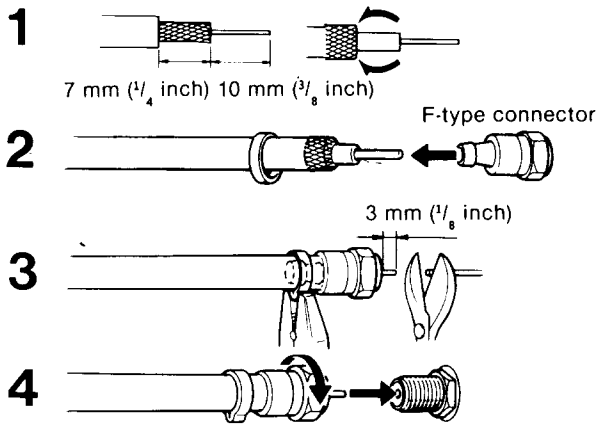
Note :
When noise appears in the TV display because of poor reception, use an antenna booster for better reception.

ANTENNA CONNECTION

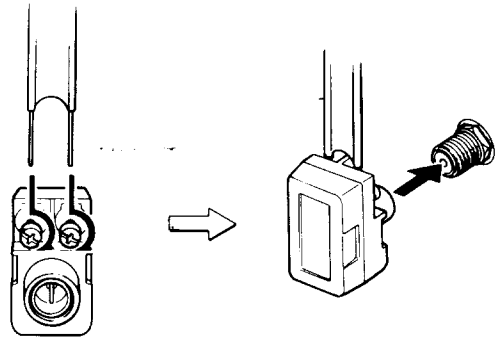
FM ANTENNA CONNECTION

To get the optimum sound of FM broadcasts, install a suitable outdoor FM antenna.
The supplied ribbon antenna may be useful until you install a more suitable antenna.

75-ohm coaxial cable connection
A 75-ohm coaxial cable is free from external interference, reduces noise pickup, and is the ideal transmission line for most FM installations. 3C-2V cable is recommended.
Connect the 75-ohm coaxial cable using a commercially available F-type connector and connect it to the FM ANT-B connector.



Ribbon antenna supplied (or 300-ohm twinlead) connection
The supplied ribbon antenna or a standard 300-ohm twin-lead is susceptible to the pickup of extraneous noise. Connect the ribbon antenna or twinlead to the supplied external antenna connector and connect it to the FM ANT-B connector. Keep the lead as short as possible and avoid running it parallel to other wires or metal pipes. Fully extend the antenna and fasten the ends to a wall using thumbtacks or adhesive tape.



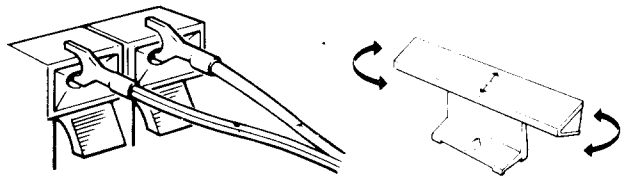
Note :
To connect another FM tuner, connect the FM external antenna to the CATV ANT-A IN connector and the CATV ANT-OUT connector to the FM tuner.

Notes on the FM and TV antennas
—When the stereo receiver and video system are connected and both are in use.
We recommend the use of outdoor antennas to obtain better quality picture and sound. Please.....
- Use the outdoor FM antenna for FM reception and the TV antenna for TV reception. Do not use the same antenna for both.
- Use 75-ohm coaxial cables for both antennas.
- Locate the two antennas as distant as possible from each other.

If the outdoor antenna installation described above is impossible and if the TV signal strength is weak, FM signals may interfere with the TV picture and sound.
To resolve this problem, press any function select key to change the tuner mode to any other modes.

AM ANTENNA CONNECTION

Supplied layout-free AM external ferrite bar antenna
Always keep the layout-free AM antenna connected to the AM external antenna terminals. Connect the lead-in with the white mark to the ⏚ terminal. AM programs cannot be received without connecting the antenna.
Adjust the position of the layout-free antenna to obtain optimum AM broadcast reception or if a sound beat should be heard while recording an AM program.



This antenna can be placed in various places, such as on a speaker or a desk, or hang on the wall, or on the rear panel of the receiver. For convenience, the antenna lead-ins of the layout-free AM antenna can be wound around the hooks on the rear of the antenna.

ANTENNA GROUND CONNECTION

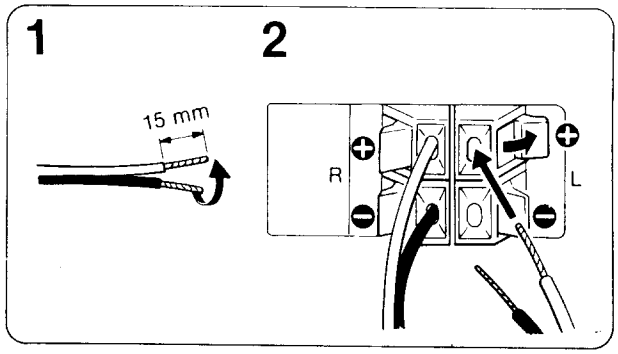
When an outdoor antenna is installed, the direct connection of the ground terminal [⏚] to a good ground is recommended for lightning protection. The use of a lightning arrester is recommended for any outdoor antenna.

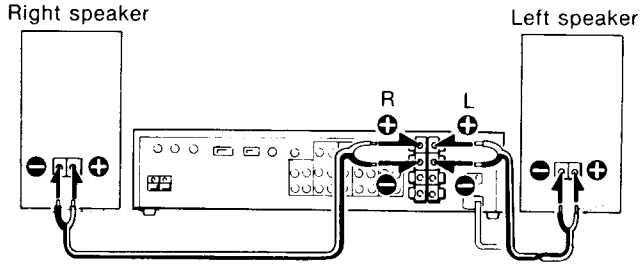
SPEAKER CONNECTION

This receiver has provision for two pairs of speaker systems—system A and system B.
Two speaker systems, A and B, can be selected individually or simultaneously by means of the front panel SPEAKERS selector.
Note that the speaker systems A and B are series-connected. No sound will be heard if only one of the speaker systems is connected and the SPEAKERS selector A and B are depressed.

Speaker impedance and power handling capacity
This receiver is designed to work best with speakers having nominal impedance from 4 to 16 ohms, and rated at 80 watts (STR-AV760) or 60 watts (STR-AV560) minimum RMS per channel with an 4-ohm or 8-ohm load from 20 – 20,000 Hz. Be sure to set the SP IMPEDANCE selector appropriately according to the impedance of the speaker systems connected. See page 8.

Speaker cord connection
1 Strip the outer covering and twist the wires.
2 Keep the terminal button depressed and fully insert the wires into the slot, and then release the button. Pull on the speaker cord lightly to see if the connection is secure.





Generally speaker cords are coded with color, or mark, indicating the ⊕ ⊖ polarities. Remember the coding and prevent faulty connections.
Right speaker: to R SPEAKER connectors
Left speaker: to L SPEAKER connectors
⊕ code: for ⊕ connection
⊖ code: for ⊖ connection

POWER SOURCE CONNECTION

Polarity of the ac power cord

A white mark is visible on one lead of the power cord and one plug is larger than the other. This will help you align the ac power cord polarity with the ac outlet polarity in order to operate the receiver and other components in the system "in phase".

The larger plug of the ac power cord of the receiver should be inserted into the negative potential of the polarized ac outlet. This plug cannot be inserted into the unpolarized ac outlet.

AC OUTLETs

Equipment whose total power consumption is less than 100 watts can be connected to these outlets.

These SWITCHED outlets are controlled by the front panel MAIN POWER switch and SYSTEM POWER switch.

The marked plug of the ac power cord of the equipment to be connected should be inserted into the negative potential of the outlet.

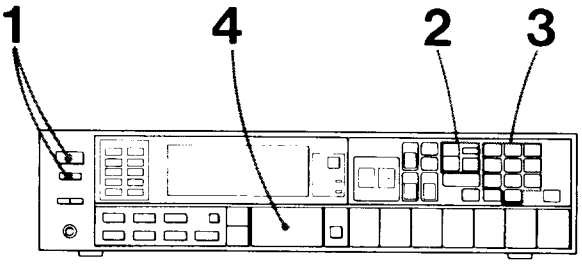
Caution

Do not connect any electrical home appliance such as an electric iron, fan, TV, video cassette recorder or other high-wattage equipment to these ac outlets.

TO RECEIVE FM/AM BROADCAST

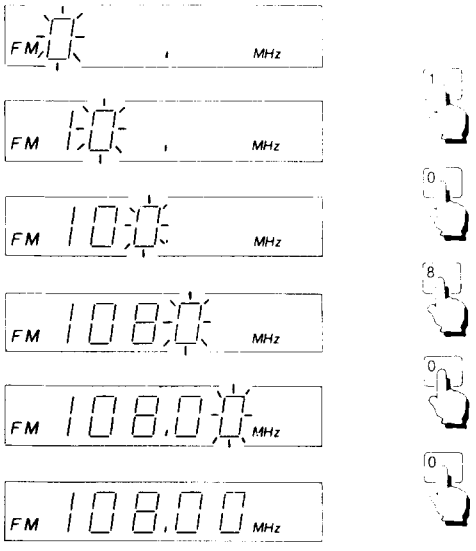
DIRECT ACCESS TUNING

When you know the frequency of the station to be received, input it with the number keys.

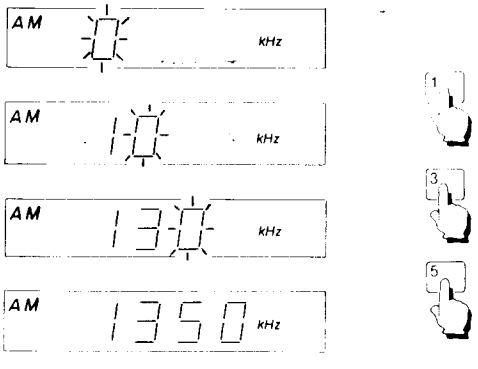


1 Depress the MAIN POWER switch and press the SYSTEM POWER switch.
2 Press the FM ANT-A, FM ANT-B or AM key. (The "0" indication will flash.)
3 Input the frequency using the number keys.

Example 1: FM 108.00 MHz



Example 2: AM 1350 kHz



4 Adjust the VOLUME control key to your preference.

Notes on AM direct access tuning

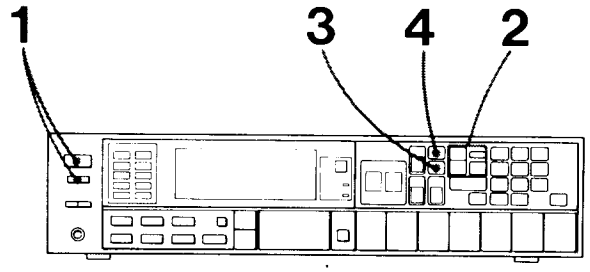
- As the AM tuning interval is preset at the factory to 10 kHz, you need not input the last digit "0" of the frequency when the first two or three digits are input.
- If you change the 10 kHz AM tuning interval to 9 kHz, input the frequency to the last digit. See "How to change the AM tuning interval" on page 3.

If you input a wrong frequency

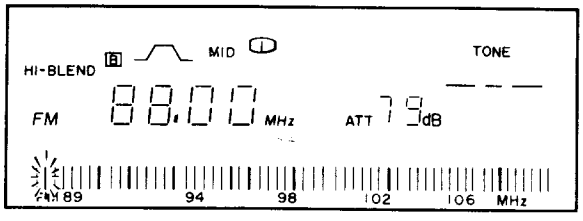
- Press the appropriate band/antenna select key again and input the correct frequency.
- If you input a frequency outside the receiver's frequency range (FM 87.5 to 108 MHz; AM 530 to 1,610 kHz), the figures will flash in the display window. In this case, press the appropriate band/antenna select key and input the correct frequency.

STATION SEARCHING

Before station scan tuning, you can find out receivable frequencies of stations.



1 Depress the MAIN POWER switch and press the SYSTEM POWER switch.
2 Press the FM ANT-A, FM ANT-B or AM key. The "0" indication will flash.
3 For FM stations, select the level of the stations to be searched with the FM LEVEL select key :
HIGH for strong stations only, MID for strong and mid-level stations or LOW for all strong and weak stations.
4 Press the SEARCH START key.
The receiver searches receivable stations in the band from the lowest frequency to the highest and the stations located are indicated by the vertical bars on the station spectrum display.
Searching will stop automatically at the lowest-frequency station located.



When only a few stations or none located, change the level of the stations to be searched for with the FM LEVEL select key and press the SEARCH START key again.

Repeat these steps for each band (FM and AM).
Once the stations are located, they are retained in memory.

Note

If you change the AM tuning interval, the searched station memory will be erased. Search the stations again.

STATION SCAN TUNING

If you do not know the frequency of the station you want to listen to and you want to know all receivable stations in your area, use the scan tuning station.
Once the stations are located, you can hear quickly what kind of programs are being broadcast by the searched stations.

1 Press the FM ANT-A, FM ANT-B or AM key.
2 Press the STATION SCAN key.
Press the "+" side for higher frequencies or the "–" side for lower frequencies.
The searched stations are automatically tuned in for several seconds each and the corresponding bar flashes.
3 To stop scanning, press the MEMORY PRESET key.
The station will be tuned in continuously.

Note :

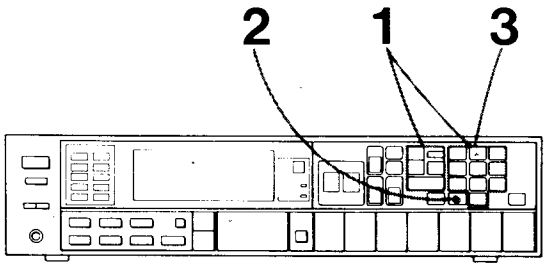
For AM reception, we recommend seaching stations before station scanning.

To quickly tune in a roughly known frequency

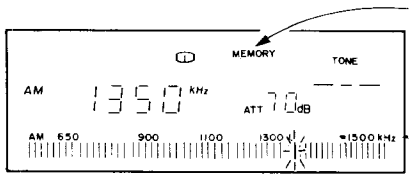
You can quickly tune in an FM or AM station whose frequency is roughly known by using direct access tuning together with sweep tuning or manual tuning. Input the approximate frequency with the direct access tuning, then press either the "+" or "–" key. For example, if you believe your station is between AM 700 and AM 800 kHz, press AM, input 7 and press the "+" side, or press AM, input 8 and press the "–" side.

MEMORY PRESETTING

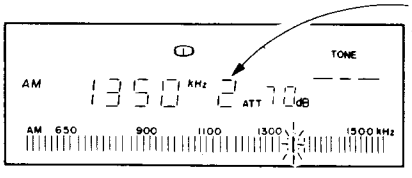
Once the frequencies of the stations you want to tune in are memorized, all you have to do is to press a number key.
A total of 10 stations can be memorized, one to each number key, in any desired sequence.



1 Tune in the desired station following the procedure described in "DIRECT ACCESS TUNING" or "STATION SCAN TUNING".
For an FM station, make sure that the IF band and FM mode settings are appropriate. If necessary, change the settings manually by pressing the FM IF BAND key and the FM MODE key.
These settings will be also memorized.
2 Press the MEMORY PRESET key. The MEMORY indication will appear for a few seconds.



3 While the MEMORY indication is displayed, press the desired number key. The MEMORY indication will disappear and the number of the pressed key will appear.



Repeat these steps for each number key.

Notes
- If the MEMORY indication has gone off, the station cannot be preset. Press the MEMORY PRESET key again and proceed to step 3.
- If you preset another station to a key on which you have already preset a station, the first station will be erased. You cannot erase a station without presetting another station.
- If you change the AM tuning interval, the preset station memory will be erased. Memorize stations again.
- The memorized FM IF band, and FM mode settings will be recalled when you tune in the station with station scan tuning.

PRESET TUNING

You can receive a station only by pressing one of the number keys to which the station has been memorized.

Memory of the last station received
This receiver includes a memory circuit to remember the station being received just before the power was turned off. The station will be automatically tuned in when the power is turned on again.

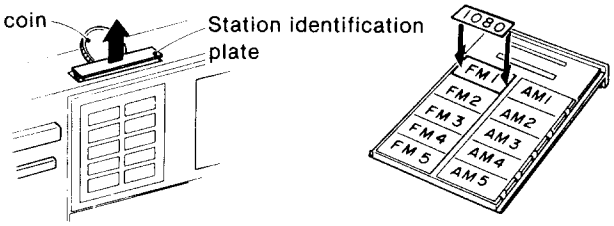
MEMORY SCANNING

This tuning allows you to quickly hear what kind of programs are being broadcast by the preset stations. When you press the MEMORY SCAN key, the number of the preset station will flash and the preset stations are automatically tuned in for several seconds each.

To stop scanning, press the appropriate number key while the station number is flashing and press the MEMORY SCAN key.

STATION LABEL INSERTION

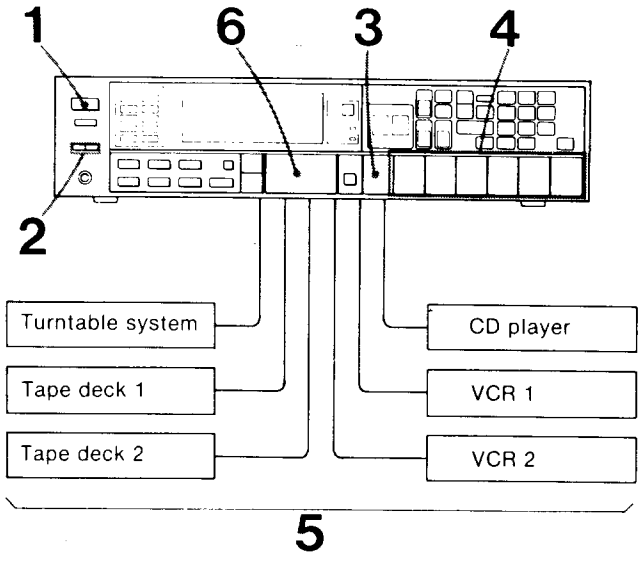
Station labels are supplied to identify the preset stations.
Affix the labels as follows:
1 Pull out the station identification plate.
2 Affix a label to the plate as shown in the appropriate order.



3 Replace the plate.

TO LISTEN TO PROGRAM SOURCES OTHER THAN BROADCASTS

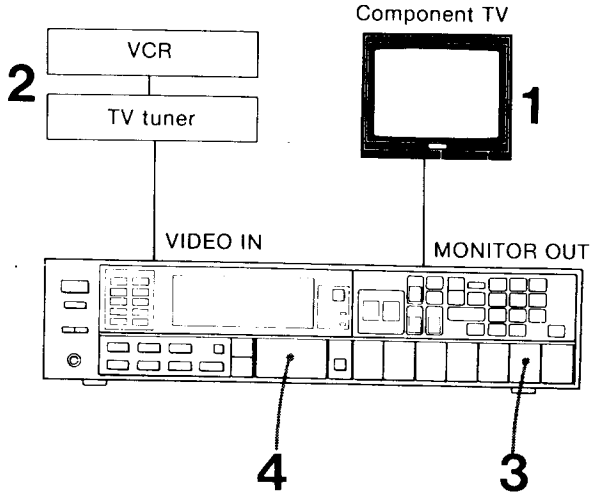
For details on connections, see the connection diagram on pages 9 to 13.



1 Turn on the receiver and connected source equipment.
2 Select the speaker system used with the SPEAKERS selector.
To drive speaker system A: depress A button.
To drive speaker system B: depress B button.
To drive both speaker systems: depress A and B buttons.
For headphone listening only: keep both buttons released.
3 If the indicator on the TAPE 2 (MONITOR) key lights up, press the key to disengage it.
4 Press the appropriate function select key.
The indication of the pressed key will appear.
PHONO: For a record
For the STR-AV760 only, press the CARTRIDGE select key so that the MC (moving-coil type cartridge) or MM (moving-magnet type cartridge) appears in the display window.
CD/AUX: For a CD program or a program from equipment connected to the CD/AUX inputs
VIDEO 1: For a TV program or a program from the VCR connected to the VIDEO 1 inputs
VIDEO 2: For a TV program or a program from the VCR connected to the VIDEO 2 inputs
TAPE 1: For the taped program of a tape deck connected to the TAPE 1 inputs
For the taped program of a tape deck connected to the TAPE 2 inputs, press TAPE 2 (MONITOR) key.
5 Start the program.
6 Adjust the VOLUME control key to your preference.

RECEIVING FM SIMULCAST TV PROGRAMS

By connecting a component TV, and a VCR or TV tuner, you can receive FM simulcast TV programs (stereo TV sound transmitted from an FM radio station) while viewing the TV program.



1 Turn on the component TV on.
2 Select the desired TV program with the VCR or the TV tuner.
3 Press the TUNER key of the receiver and tune in the FM simulcast TV program.
4 Adjust the VOLUME control key to your preference.

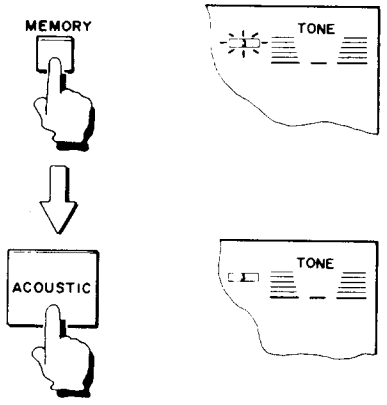
RECEIVING FM SIMULCAST CABLE TV PROGRAMS

By connecting the CATV cable to this receiver, you can receive FM simulcast cable TV programs without using a signal splitter.
For connection, see "CATV system connection" on pages 12 and 13.
1 Turn on the TV and select the desired CATV program with the VCR or TV tuner.
2 Press the FM ANT-A key of the receiver. The CATV indicatior will light up.
3 Tune in the FM simulcast cable TV program on the receiver.
4 Adjust the VOLUME control key to your preference.

TO SET THE ACOUSTIC SETTINGS

This receiver can store and recall three different tone control settings to easily set the tone controls to match three different types of music.

1 Press the ACOUSTIC key to select the acoustic memory number [1], [2] or [3]. With each press of the key, the number displayed in the window increases.
2 Adjust the tonal quality to your preference. The acoustic memory number will disappear.
3 Press the MEMORY key. While the selected acoustic memory number flashes, press the ACOUSTIC key. Now one of the three acoustic settings is committed to memory.



This receiver retains the contents of the memory even when the power is off, and recall them whenever you want.

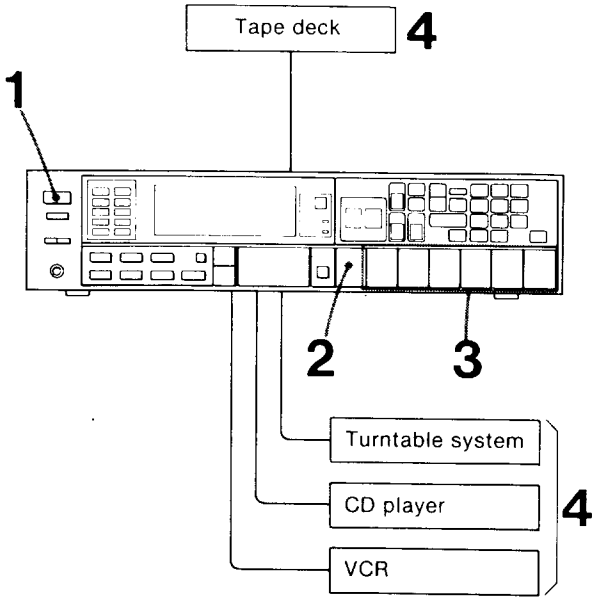
To check the acoustic setting
Once the setting is set, press the FLAT key. All the acoustic settings are disengaged and a flat frequency response results. Then press the ACOUSTIC key to call up the memorized number, so that the original settings will be recalled. Now compare the effect of the settings with the flat frequency response.

To change temporarily a part of the acoustic settings
Simply change the part of the acoustic setting you want. You can recall the original settings later by pressing the ACOUSTIC key.

To change all the acoustic settings
Simply set the new acoustic settings as you like and memorize them as described before.

TO RECORD ON AN AUDIO TAPE

RECORDING



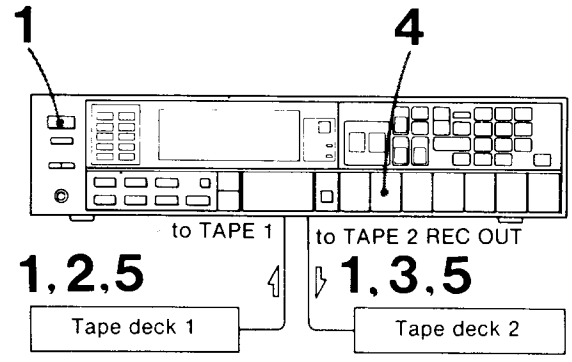
1 Turn on the receiver and connected source equipment.
2 If the indicator on the TAPE 2 (MONITOR) key lights, press this key to disengage it.
3 Select the desired program source with the function select key.
To select the tuner program, press the desired number key if you have already memorized the stations. If not, tune in the desired station.
4 Start the program source and set the tape deck in the recording mode.

The VOLUME, BASS and TREBLE TONE control keys' setting does not have any affect on the recording.

HI-FI VIDEO RECORDING

AUDIO TAPE DUBBING

To dub a tape, you need a tape deck in addition to the deck for recording.
Connect the line outputs of the tape deck for playback to the TAPE 1 TAPE inputs and the line inputs of another deck for recording to the TAPE 2 REC OUT jacks.



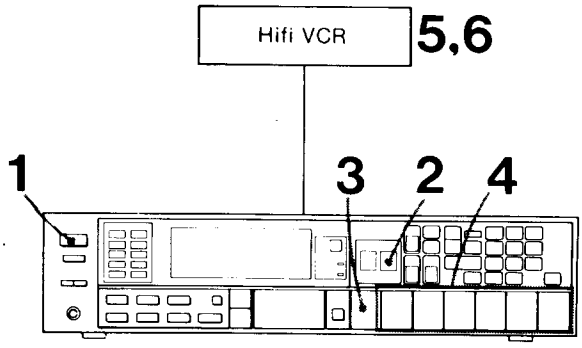
1 Turn on the receiver and the connected tape decks.
2 Insert the recorded tape into tape deck 1 and a blank tape into tape deck 2.
3 Adjust the recording level of tape deck 2.
4 Press the TAPE 1 (TAPE 1 → 2) key.
5 Start playback of tape deck 1 and set the tape deck 2 in the recording mode. Dubbing will begin.

Note: You cannot dub a tape from tape deck 2 to tape deck 1.

Monitoring of a 3-head tape deck
If you have connected a tape deck having separate record and playback heads to the TAPE 2 TAPE inputs, you can monitor the recording results while recording or dubbing. Press the TAPE 2 (MONITOR) key. The MONITOR indicator will light up and the recorded program will be heard. Press the TAPE 2 (MONITOR) key again to listen to the source sound.

For connection, see the connection diagram on pages 9 and 10. For operation of the hi-fi VCR, refer to its instruction manual.

RECORDING SOUND ON A VIDEO TAPE



1 Turn on the receiver and the hi-fi VCR.
2 Press the AUDIO key of the receiver. The indication on this key will light up.
3 Be sure that the TAPE 2 (MONITOR) key is disengaged.
4 Select the desired program source with the function select key.
To choose the tuner program source, press the desired number key if you have already memorized the stations. If not, tune in the desired station.
5 Insert a video cassette into the hi-fi VCR and adjust the recording level.
Set the filter switch of the VCR, if it has one, to ON.
6 Start the program and set the VCR in the recording mode.

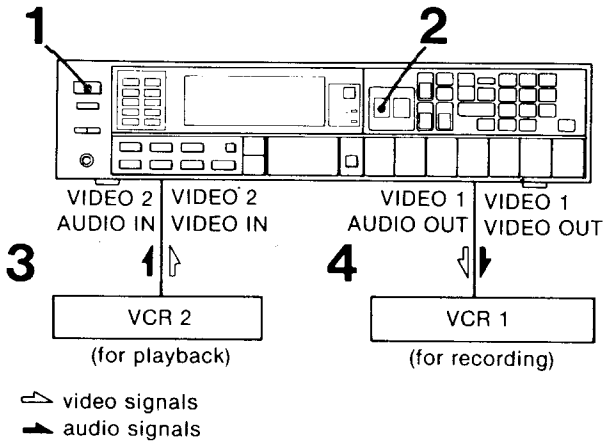
The VOLUME, BASS and TREBLE TONE control keys' setting does not have any affect on the recording.

Note: you cannot record on a VCR connected to VIDEO 2 jacks.

VIDEO TAPE EDITING

To edit a video tape, you need to connect another VCR for playback to the VIDEO 2 inputs.

Operation



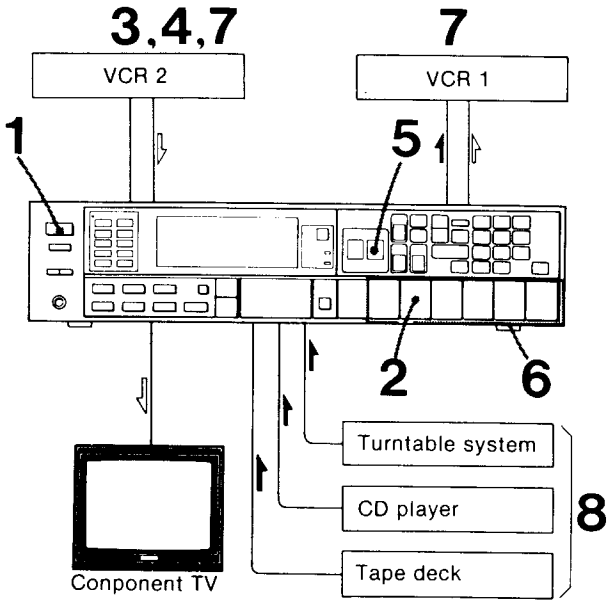
1 Turn on the receiver and the connected equipment.
2 Press the VIDEO key of the receiver. The indicator on this key will light up.
3 Set the VCR 2 in playback mode.
4 Set the VCR 1 in recording mode. Editing will begin.

You can listen to an audio program source while editing a video tape, by pressing any function select key.

Note : You cannot edit a video tape from VCR 1 to VCR 2.

ADDING SOUND ON A VIDEO TAPE WHILE EDITING

During video tape editing, you can add an audio program source, thus making your own personalized video tape. The new sound will be recorded and the previous sound will be erased.



1 Turn on the receiver and the connected equipment.
2 Press the VIDEO 2 key.
3 Insert a recorded video tape into the VCR 2 and set it in playback mode.
4 At the point where audio dubbing is to start, press the ❚❚ PAUSE button on the VCR 2.
5 Press AUDIO key on the receiver. The indication on this key will light up.
6 Press the desired function select key.
7 Release the pause mode of the VCR 2 and set the VCR 1 in recording mode.
8 Start playing the selected program source.

REMOTE CONTROL OPERATION WITH AN OPTIONAL REMOTE COMMANDER

Using the optional RM-S760 remote commander, you can remotely control power on/off, preset tuning, program selection, volume adjustment, etc. of the receiver and various functions of connected components.

Sony equipment which can be remotely controlled with the RM-S760:

Turntable systems: PS-LX410, PS-LX500, PS-LX510, PS-FL7, PS-FL9

Cassette decks: TC-FX410, TC-FX510R, TC-FX310, TC-FX705, TC-FX707R, TC-K555ES, TCK666ES, TC-K333ES, TC-K777ES, TC-W7R and other cassette deck equipped with a Sony standard 4-pin or 5-pin remote control jack

CD players: CDP-111, CDP-302

Before remote control operation, be sure that the system and the remote control cords are connected correctly (See the instruction manual of the RM-S760) and depress the MAIN POWER switches of the receiver and the connected equipment.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

STR-AV760
With 8-ohm load, both channels driven, from 20 - 20,000 Hz, rated 80 watts per channel minimum RMS power, with no more than 0.006% total harmonic distortion from 250 milliwatts to rated output.

STR-AV560
With 8-ohm load, both channels driven, from 20 – 20,000 Hz, rated 60 watts per channel minimum RMS power, with no more than 0.008 % total harmonic distortion from 250 milliwatts to rated output.

OTHER SPECIFICATIONS

Amplifier section

Continuous RMS power output
- STR-AV760: 85 W + 85 W *1
- 80 W + 80 W *2
- STR-AV560: 65 W + 65 W *1
- 60 W + 60 W *3

*1 4 or 8 ohms, at 40 - 20,000 Hz less than 0.02 % total harmonic distortion

*2 4 ohms, at 20 - 20.000 Hz less than 0.009 % total harmonic distortion

*3 4 ohms, at 20 - 20.000 Hz less than 0.02 % total harmonic distortion

Dynamic headroom
- STR-AV760: 1.4 dB ('78 IHF)
- STR-AV560: 1.5 dB ('78 IHF)

Harmonic distortion
- STR-AV760: Less than 0.006 %
- STR-AV560: Less than 0.008%
- (8 ohms, at rated output)

Intermodulation (IM) distortion (60 Hz : 7 kHz = 4 : 1)
- STR-AV760: Less than 0.006 %
- STR-AV560: Less than 0.008%
- (8 ohms, at rated output)

Frequency response
- PHONO: RIAA equalization curve ±0.5 dB
- CD/AUX, VIDEO 1, 2 (audio), TAPE 1, 2: 5 Hz - 100 kHz $^{+0}_{-1}$ dB

Residual noise: Less than 70 μV (8 ohms, network A)

Damping factor
- STR-AV760: 45
- STR-AV560: 40
- (8 ohms, 1 kHz)

Inputs

		Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	MM	2.5 mV	50 kilohms	87 dB, 79 dB** (A, 2.5 mV)
	MC*	0.25 mV	100 ohms	69 dB, 78 dB** (A, 0.25 mV)
CD/AUX VIDEO 1,2 (audio) TAPE 1,2		150 mV	50 kilohms	105 dB 86 dB* (A, 150 mV)

*STR-AV760 only ** '78 IHF

Outputs
REC OUT 1, 2
Voltage 150 mV
Impedance 10 kilohms
SPEAKER A, B
Accepts speakers of 4 - 16 ohms.
HEADPHONES
Accepts low and high impedance headphones.

Video inputs/outputs
VIDEO IN 1, 2 : 1 $V_{p\text{-}p}$, 75 ohms, unbalanced
VIDEO OUT 1, MONITOR VIDEO OUT : 1 $V_{p\text{-}p}$, 75 ohms, unbalanced

Tone controls
BASS
±8 dB at 100 Hz
TREBLE
±8 dB at 10 kHz

Subsonic filter 6 dB/octave attenuation below 15 Hz

FM tuner section

Tuning range 87.5 MHz - 108 MHz

Antenna terminals
75 ohms, unbalanced (2)

Intermediate frequency
10.7 MHz

Sensitivity at 50 dB quieting
16.1 dBf, 3.5 μV (mono)
38.3 dBf, 45 μV (stereo)

Usable sensitivity
10.3 dBf, 1.8 μV (IHF)

Signal-to-noise ratio
82 dB (mono), 76 dB (stereo)

Harmonic distortion
0.05% (mono), 0.1% (stereo) at 1 kHz, WIDE

IM distortion 0.05% (mono), 0.1% (stereo), WIDE

Separation 50 dB at 1 kHz, WIDE

Frequency response
30 Hz - 15 kHz $^{+0.5}_{-1.5}$ dB

Selectivity
65 dB at 400 kHz, NORMAL
30 dB at 400 kHz, WIDE

Capture ratio 1.2 dB

AM suppression ratio
54 dB

Image response ratio
80 dB

IF response ratio
90 dB

Spurious response ratio
100 dB

RF intermodulation
65 dB

Searching threshold
LOW 30 dBf, MID 40 dBf, HIGH 50 dBf

AM tuner section

Tuning range
530 — 1,610 kHz (with the AM tuning interval set at 10 kHz)
531 — 1,602 kHz (with the AM tuning interval set at 9 kHz)

Antenna
Layout-free antenna
External antenna terminal

Intermediate frequency
450 kHz

Usable sensitivity
50 dB/m, layout-free antenna (at 1,000 kHz)
100 μV, external antenna (at 1,000 kHz)

Signal-to-noise ratio
54 dB (at 50 mV/m)

Harmonic distortion
0.3% (at 50 mV/m, 400 Hz)

Selectivity
40 dB (10 kHz)
35 dB (9 kHz)

Searching threshold
55 dB/m

General

System
Tuner section : PLL quartz-locked digital synthesizer system
Amplifier section : low-noise NF type equalizer amp, pure complementary SEPP

Power requirements
120 V ac, 60 Hz

Memory back-up power : Lithium battery, 3 V dc

Power consumption
STR-AV760 : 170 W
STR-AV560 : 150 W
In standby condition : 5 W

AC outlets Two switched (total 100 watts)

Dimensions
Approx. 430 x 105 x 345 mm (w/h/d)
(17 x 4 1/4 x 13 5/8 inches)
including projecting parts and controls

Weight
STR-AV760 :
Approx. 8.6 kg (19 lb) net
Approx. 10.1 kg (22 lb 5 oz) in shipping carton
STR-AV560 :
Approx. 8 kg (17 lb 11 oz) net
Approx. 9.5 kg (21 lb) in shipping carton

Accessories supplied
FM ribbon antenna (1)
AM layout-free antenna (1)
Station label (1 set)
External antenna connector (1)

Design and specifications subject to change without notice.

TROUBLE CHECKS

Should any problem persist after you have made these checks, consult your nearest Sony service facility. Before going through the check list below, first refer back to the connection and operating procedures.

Broadcast programs

STEREO indicator flickers or does not light when receiving stereo programs
- Adjust the antenna or connect an external FM antenna.
- Press the FM MODE key to set to HI-BLEND or MONO mode.

No station can be located by station searching
- For FM stations, press the FM LEVEL select key to set MID or LOW level.
- For AM stations, the signal strength of the stations is too weak for station searching. Adjust the antenna or tune in the stations with direct access tuning.
- The AM tuning interval is set incorrectly.

Change the tuning interval according to the AM frequency allocation system of your country. (page 3)

Tuning cannot be done correctly when the number key is pressed
- Memorize the frequency correctly.

Video programs

No picture
- Check the video connection. (pages 10, 11 and 12)
- Check the function switch setting of the VCR.
- Check that the component TV is turned ON.
- Check the function select keys of the receiver. The VIDEO key (1 or 2) must be pressed.

No sound
- Check the video sound connection. (pages 10, 11 and 12)
- Check the function switch setting of the VCR.
- Check the function select keys of the receiver. The VIDEO key (1 or 2) must be pressed.
- Set the volume control of the TV tuner to maximum.

Amplifier

No audio
- Check speaker and program source connections.
- Check the settings of the TAPE 2 (MONITOR) and function select keys.
- Check the SPEAKERS selector setting.
- Turn up the volume.

No audio from one channel or unbalanced left and right volume
- Adjust the BALANCE control key.
- Check the speaker and input connections of the inoperative channel.

Abrupt loss of sound from one or both of the speakers and the PROTECTOR indication flickering in the display window*
- Turn off the receiver and check the speaker terminals or speaker cord for a short. If there is no short, consult your nearest Sony dealer.

* This symptom may be caused when the protection circuit activates.

Reversed left and right sound
- Check the speaker connection for proper phasing.

Lack of bass sound or obscure instrument position
- Check the speaker connection.

Severe hum or noise
- Use shielded connecting cords.
- Keep the connecting cords away from transformers or motors and at least 3 meters (10 feet) from TV sets and fluorescent lights.
- If the TV set and audio components are too close together, do not use both TV set and audio components at the same time. If both are used at the same time, separate the TV set from the audio components.
- Ground the receiver.
- Make secure connections.
- Wipe the plugs and jacks with a cloth lightly dampened with methanol.

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